

REMARKS

Claims 1-10, 12-43 and 47-67 are pending in the application. By this paper, claims 11 and 44-46 have been cancelled and claims 1, 4, 5, 9, 10, 12, 19-23, 53, and 58 have been amended. Reconsideration and allowance of claims 1-67 in light of the amendments and arguments herein are respectfully requested.

Rejection under 35 U.S.C. § 102

Claims 1, 2 and 4 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. patent number 5,329,578 to Brennan, et al. ("Brennan"). Claim 1 has been amended to distinguish the invention defined by this claim over the disclosure of Brennan. Specifically, the limitation from claim 4 of "determining if a called party is a subscriber to a call routing service" has been added to claim 1 from claims 4 and 5. Further, additional limitations defining how this determination is made in one embodiment have been added. No new matter is added by this amendment. Support for the amendment may be found at page 7, line 26 – page 8, line 7.

The added limitations are not disclosed in Brennan. In Brennan's system,

When a caller 14 dials the personal number (PN) of a PCS subscriber 15, the call is intercepted by the host node 11 as being a call directed to a PCS service subscriber.

Brennan, column 4, lines 25-28. Thus, a special personal number must be arranged or set up for the subscriber in the Brennan system:

PN setup. When an existing number is reconfigured to be the subscriber's PN, a new number will be required for the location previously address by the PN. If this is not provided, PCS will not be able to terminate calls to the subscriber at that location due to destination looping.

Brennan, column 4, lines 5-10. In contrast with the Brennan system, in accordance with the method of claim 1, no new numbers are required. Call processing is handled by equipment of the telecommunication system without using up resources such as directory numbers.

Accordingly, independent claim 1 recites limitations nowhere shown in Brennan. Withdrawal of the 35 U.S.C. § 102(b) rejection of claims 1, 2 and 4 is respectfully requested. Since the claimed method includes limitations having advantages nowhere shown, described or

suggested by the prior art of record, it is further submitted that claim 1 is unobvious over this reference and is therefore allowable. Claims 2-8 are dependent from claim 1 and are allowable for the same reasons.

Rejections under 35 U.S.C. § 103

Claims 3, 5-20, 44-46 and 53-62 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of U.S. patent number 6,041,114 to Chestnut ("Chestnut"). Claims 21-23, 29-39, 47-52 and 63-67 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Brennan in view of Chestnut and further in view of U.S. patent number 6,647,108 to Wurster, et al. ("Wurster"). Claim 24 stands rejected under 35 U.S.C. § 103(a) as being unpatentable over Wurster. Claims 25-28 and 40-43 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Wurster in view of U.S. patent number 6,674,851 to Brush, et al. ("Brush"). Reconsideration of these rejections is respectfully requested.

Independent claim 9

Claim 9 has been amended by limiting this claim to an Advanced Information Network (AIN) telecommunication system, including a Service Control Point (SCP) and another network element. Support for this amendment may be found at FIG. 1 and the accompanying text and at page 8, lines 11-16.

As amended, claim 9 recites an invention distinct from the disclosure of Brennan and Chestnut. Brennan discloses processing of calls in a service node of a Public Switch Telephone Network (column 4, lines 19-25) but fails to show, describe or suggest using AIN components such as an SCP and the call processing features thereof. Similarly, Chestnut discloses call processing in a private branch exchange (PBX) coupled to the PSTN (column 4, lines 35-40). Again, a suggestion to provide the disclosed functionality is missing from Chestnut, along with the disclosure of interaction with AIN components such as an SCP.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claim 9 is respectfully requested.

Independent claim 10

Independent claim 10 has been amended by rewriting the limitation of claim 11 into claim 10. As amended, claim 10 recites “based on the terminating number, determining if the called party is a subscriber to a call routing service.” Brennan and Chestnut fail to disclose this limitation. As noted above in connection with claim 1, Brennan discloses use of a pre-assigned personal number (PN) for a subscriber:

When a caller 14 dials the personal number (PN) of a PCS subscriber 15, the call is intercepted by the host node 11 as being a call directed to a PCS service subscriber.

Brennan, column 4, lines 25-28. Thus, since the Brennan system is operating on a pre-assigned number, Brennan has no need to use the terminating number to determine if the called party is a service subscriber. The only way to access Brennan’s service is to call the pre-assigned number which is inherently associated with PCS processing. In contrast, a subscriber’s general telephone number may be added to the subscription service without having to re-assign the number or make other provisions. The operation of the telecommunication system verifies during call processing that the called party is a subscriber to the service. This provides a more generalized operation than the customized processing of Brennan.

Accordingly, independent claim 10 includes limitations absent from Brennan and Chestnut. Withdrawal of the 35 U.S.C. § 103(a) rejection of this claim is respectfully requested. Claim 11 has been cancelled and claim 12 has been amended to make this claim dependent on claim 10. Claims 12-18 are dependent from claim 10 and add further limitations thereto, and are allowable for the same reasons.

Independent claim 19

Claim 19 has been amended to clarify that the claimed embodiment is an AIN telecommunication system. The network element has been amended to recite “a compact service node.” Support for this amendment is found at page 4, line 16 and FIG. 1 of the application. In the recitation of amended claim 19, the compact service node interacts with the SCP of the AIN to obtain a subscriber profile.

These limitations are missing from the disclosure of Brennan and Chestnut. Chestnut uses a PBX to implement certain call processing functionality. Brennan does not disclose a compact service node which interacts with a SCP of an AIN in the manner recited by claim 19. Accordingly, claim 19 includes limitations missing from these references and is therefore allowable. Claims 20-23 are dependent from claim 19 and are allowable for the same reasons. Withdrawal of the 35 U.S.C. § 103(a) rejections of these claims is respectfully requested.

Independent claim 24

The office action states that Wurster does not disclose “initiating an interactive communication between an Intelligent Peripheral (IP) of the AIN and the calling communication station” and “communicating information about call routing data received from the calling communication station from the IP to the SCP,” as required by claim 24. The office action asserts that “it would have been obvious to one of ordinary skill in the art at that the steps of initiating an interactive communication between an IP and the calling station and communicating information about call routing data received from the calling station from the IP to the SCP are obvious in the signaling intelligent network and the advantage of using them are well known.”

This rejection is respectfully traversed. In accordance with MPEP 2144.03, facts asserted to be well-known “must be capable of such instant and unquestionable demonstration as to defy dispute.” If such is not the case, “assertions ... specific knowledge of the prior art must always be supported by citation to some reference work recognized as standard in the pertinent art.”

Applicant traverses the assertion that the claimed invention is “well known.” The office action has cited references showing detailed interaction between components of an AIN, such as an SCP, SSP and service node. These references include Brennan and Wurster. However, none of these cited references fully discloses the claimed invention. Since “It is never appropriate to rely solely on common knowledge in the art without evidentiary support in the record as the principal evidence upon which a rejection was based,” MPEP 2144.03, applicant requests evidentiary evidence in support of the assertion of facts which are “well known.” Alternatively, applicant respectfully requests allowance of claim 24.

With respect to dependent claims 25-28, the rejection of these claims is respectfully traversed as well. Claim 25 recites “communicating between the SCP and the IP according to

GR1129 protocol” and claim 26 recites “encrypting at least one of data and instructions in a message of the GR1129 protocol; and decrypting the message.” The present application acknowledges the use of GR 1129 messaging in an AIN network, for example, at page 19. However, the application further notes limitations of the conventional usage of GR 1129:

AIN triggers such as TAT and SDS can be used to stop and route the call more efficiently than simply using SSP-SSP call routing. However, the scope of the GR 1129 protocol limits how much of the SN/IP functionality can be utilized. For example, the full range of programming capabilities on the SN/IP cannot be used in some applications. This can mean that mixing and matching technologies, such as text-to- speech, speech recognition, digit outpulse, etc., cannot be done.

Page 19, lines 10-16. In a significant advance over conventional signaling, the present application discloses incorporation of GR 1129 signalling in a call routing method. “[A]n application or series of program instructions can be invoked on an SN/IP of the network based on an encrypted message in the GR 1129 protocol received from another network element of the network. For example, a message which instructs the SN/IP to “play announcement number 27” might be coded on the SN/IP to “invoke application number 3201” which can use the full range of the SN/IP’s programming and functionality, such as speech recognition, text-to-speech conversion and so forth.” Page 19, lines 20-26. Details of one embodiment are shown in FIG. 9 and the text of the application associated therewith.

Accordingly, in addition to the unobvious invention defined by claim 24, dependent claims 25-28 define additional features not shown in the prior art of record. These claimed features of using GR 1129 signalling in a unique manner and encrypting information about call routing provide significant advantages over the convention techniques disclosed in, for example Brush. Withdrawal of the 35 U.S.C. § 103(a) rejections of claims 24-28 is respectfully requested.

Independent claim 29

This rejection is respectfully traversed. Claim 29 recites limitations not shown, described or suggested by the cited references. For example, claim 29 recites “at the SCP, retrieving call routing option data associated with the called party” and in response to the call routing option data, activating an Intelligent Peripheral (IP) of the AIN to provide one or more menu options

and receive one or more menu choices from the calling party.” As discussed above, Brennan discloses a system which relies on a pre-assigned personal number (PN) and lacks the flexibility of the presently disclosed system and method which makes use of AIN components.

Moreover, Brennan lacks any suggestion to modify its disclosure or to combine the disclosure of Brennan with AIN components such as those disclosed in Wurster. “To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.” MPEP 2143. The office action fails to state any motivation to combine the cited references to produce the invention defined by claim 29. None can properly be given. Moreover, even if Brennan, Chestnut and Wurster can be combined as proposed, not all the limitations of claim 29 are taught or suggested, as noted above.

Accordingly, the office action has failed to establish a *prima facie* case of non-obviousness in the manner required by MPEP 2143. Withdrawal of the rejection of claim 29 is therefore respectfully requested. Claims 30-36 are dependent from claim 29 and are allowable for the same reasons and for other reasons as well. For example, dependent claim 32 recites communicating in accordance with the GR 1129 protocol; claim 33 recites encrypting command instructions in a GR 1129 message.

Independent claim 37

The rejection of claim 37 is traversed for the same reasons noted above in connection with the discussion of claim 24. Further, this claim recites limitations not shown, described or suggested by the cited prior art, including Brennan, Chestnut, Wurster and Brush. For example, claim 37 recites “a service node/intelligent peripheral (SN/IP) configured to provide call routing menu options to the originating switch and collect call routing menu choices” and “a Service Control Point (SCP) in data communication with the originating switch and the SN/IP according to GR1129 protocol, the SCP configured to receive the information about the received call, retrieve stored subscriber routing information associated with the DN in response to the

information and to use the SN/IP as a call routing information resource, the SCP further configured to route the call to a terminating switch in accordance with the subscriber routing information and information from the SN/IP about one or more call menu routing choices.” Still further, the office action fails to provide the required motivation to combine the cited references in the manner proposed.

Accordingly, withdrawal of the 35 U.S.C. § rejection of claim 37 is respectfully requested. Claims 38-39 are dependent from claim 37 and are submitted to be allowable for the same reasons.

Independent claims 40 and 41

The rejection of claim 40 is respectfully traversed. This claim includes limitations not taught or suggested by Wurster or Brush. For example, claim 40 recites “a Service Control Point (SCP) in data communication with the originating switch and the SN/IP according to GR1129 protocol, the SCP configured to receive the information about the received call, retrieve stored subscriber routing information associated with the DN in response to the information and to use the SN/IP as a call routing information resource, the SCP further configured to route the call to a terminating switch in accordance with the subscriber routing information and information from the SN/IP about one or more call menu routing choices” and “using the selected code, retrieving at least one of data and program instructions from storage” for execution.

As described above in conjunction with the rejection of claim 24, the presently disclosed embodiments make use of conventional devices of an AIN network and GR1129 signalling but in a unique way. In accordance with the method of claim 40, a selected code is used to identify data and/or instructions for retrieval and execution. Similarly, with respect to independent claim 41, “a program code [is] stored at the second network element and [is] selectable in response to a code included in a GR1129 message.” This allows the limited functionality provided by GR1129 signalling to be extended in a unique and useful way not disclosed, described or suggested by Brush or Wurster. Accordingly, the 35 U.S.C. § 103(a) rejection may not be maintained; withdrawal of this rejection is respectfully requested.

Independent claim 44

This claim has been cancelled, along with dependent claims 45 and 46.

Independent claim 47

Rejection of claim 47 is respectfully traversed. This claim recites limitations not disclosed by the cited references. For example, : providing a World Wide Web display including data entry slots configured to receive verbal call destination indicators and corresponding telephone numbers,” ” receiving a data transmission containing data related to the verbal call designation indicators and the corresponding telephone numbers,” and storing the data for subsequent access,” are missing from the cited references. Accordingly, the rejection under 35 U.S.C. § 103(a) may not be maintained. Withdrawal of this rejection is respectfully requested.

Independent claim 50

The rejection of claim 50 is respectfully traversed. This claim recites limitations not disclosed by the cited references. For example, “one or more call termination option fields,” “one or more telephone number fields, each telephone number field corresponding to a call destination option” and a select button in a user interface for updating subscriber specific call routing menu choices is not disclosed. Accordingly, the rejection under 35 U.S.C. § 103(a) may not be maintained. Withdrawal of this rejection is respectfully requested.

Independent claim 53

Claim 53 has been amended to distinguish the invention defined by this claim over the cited references. As amended, claim 53 recites “receiving a call from a caller, the call including a subscriber-identifying directory number,” and “identifying a service subscriber associated with the subscriber-identifying directory number.” Brennan discloses a system using a personal number (PN) which is re-assigned to identify the subscriber to the PCS service. In contrast, the method of claim 53 includes “identifying a service subscriber associated with the subscriber-identifying directory number.” This identification act is missing from the disclosure of Brennan.

Accordingly, since claim 53 recites limitations missing from the cited references, the 35 U.S.C. § 103(a) rejection of this claim may not be maintained. Withdrawal of the rejection and

allowance of claim 53 are respectfully requested. Claims 54-57 are dependent from claim 53 and are allowable for the same reasons.

Independent claim 58

According to the office action, Brennan does not disclose or suggest that, upon selection of an additional call routing option by the caller, the caller is charged a fee and the call is routed in accordance with the selection option. However, according to the office action, it would have been obvious that some additional call routing options would charge a caller a fee.

Claim 58 has been amended to distinguish the invention defined by this claim. The invention provides an improved directory assistance method which encourages additional usage of directory assistance services, which also allows the directory service provider to generate revenues for providing the service. Thus, claim 58 as amended recites "charging the caller a fee for routing the call in accordance with the selected option. Thus, this claim limitation is not met by routing the call to outside services (such as a private operator or external answering service), as asserted by the office action.

Withdrawal of the 35 U.S.C. § 103(a) rejection of claim 58 is respectfully requested. Claims 59-61 are dependent from claim 58 and are allowable for the same reasons.

Independent claim 62

The rejection of claim 62 is respectfully traversed. This claim recites limitations not disclosed in the prior art or record, as acknowledged by the office action. For example, claim 62 recites "a preferred group of directory numbers for simultaneous ringing during menu-based call routing" and "a preferred sequence of directory numbers for sequential ringing during menu-based call routing." A rejection under 35 U.S.C. § 103(a) may be maintained only if all limitations of the claim are taught or suggested by the cited references. The office action fails to identify the required teaching or suggestion of the quoted limitations of claim 62. Accordingly, withdrawal of the rejection of claim 62 is respectfully requested.

Independent claim 63 and 66

Claims 63 and 66 recites limitations nowhere shown, described or suggested by the cited references. Claim 63 recites a SCP and a service node in communication. The service node responds to command data from the SCP to provide a menu of call routing options based on a subscriber profile and to receive a call routing option from a caller. Claim 66 further recites that the service node includes a SN database and SN service logic.

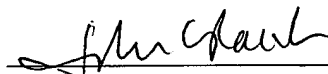
The cited references, taken in combination, do not disclose the invention of claims 63 and 66. Brennan discloses processing of calls in a service node of a Public Switch Telephone Network (column 4, lines 19-25) but fails to show, describe or suggest using AIN components such as an SCP and the call processing features thereof. Similarly, Chestnut discloses call processing in a private branch exchange (PBX) coupled to the PSTN (column 4, lines 35-40). Again, a suggestion to provide the disclosed functionality is missing from Chestnut, along with the disclosure of interaction with AIN components such as an SCP. Wurster discloses call processing by AIN components but lacks a suggestion to modify the disclosed system and its operation to provide the claimed features. The rejection has failed to show that all the claim limitations are taught or suggested by the combined references and failed to show motivation to combine the references in the suggested manner. Therefore, the rejection may not be maintained.

Accordingly, withdrawal of the 35 U.S.C. § 103(a) rejection of claims 63 and 66 is respectfully requested.

Application no. 09/963,719
Amendment dated: June 14, 2004
Reply to office action dated: February 13, 2004

With this response, the application is believed to be in condition for allowance. Should the examiner deem a telephone conference to be of assistance in advancing the application to allowance, the examiner is invited to call the undersigned attorney at the telephone number below.

Respectfully submitted,



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June 14, 2004
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